

CORRECTED CLAIMS FOR APRIL 28, 2006 AMENDMENT

LISTING OF CLAIMS

1. (currently amended) A vehicle air-conditioning system, comprising:
 - ~~a case defining a first air inlet and a second air inlet, wherein~~
 - ~~the first air inlet permits cool air to enter said case and said second air inlet permits hot air to enter said case, and~~
 - ~~said second air inlet is disposed above said first air inlet;~~
 - ~~a foot opening disposed at a location downstream of said first air inlet and said second air inlet;~~
 - ~~a face opening disposed at a location downstream of said first air inlet and said second air inlet, said face opening disposed above said foot opening;~~
 - ~~a blow mode changing door, wherein said door is a butterfly door for opening and closing said foot opening and said face opening; and~~
 - ~~a door housing portion for pivotably housing said blow mode changing door, wherein~~
 - an air conditioning case defining a first housing portion and a second housing portion, said second housing portion being disposed at a location downstream of said first housing portion in an air flow direction;
 - a heating heat exchanger disposed in said first housing portion for heating air; and
 - a blow-mode changing door pivotably housed in a door-housing portion defined by said second housing portion, wherein

said second housing portion defines a first air inlet and a second air inlet which communicate with said first housing portion, said second air inlet is disposed higher than said first air inlet,

said first air inlet permits cool air to enter said second housing portion from said first housing portion, and said second air inlet permits hot air having passed through said heating heat exchanger to enter said second housing portion from said first housing portion,

said second housing portion further defines a foot opening and a face opening disposed downstream of said first air inlet and said second air inlet, said face opening is disposed higher than said foot opening,

said blow-mode changing door is a butterfly door movable to a first position where said foot opening is fully closed and said face opening is open, a second position where said foot opening is open and said face opening is fully closed, and a third position where said foot opening and said face opening are open, wherein

~~in a bi-level mode in which said blow mode changing door opens both said foot opening and said face opening~~ is at said third position, a bi-level mode bypass passageway for introducing cool air from said first air inlet into said face opening is defined between an extremity of said blow mode-changing door and inner wall surface of said door-housing portion.

2. (currently amended) The vehicle air conditioning system according to claim 1, further comprising:

a sealing rib provided on the inner wall surface of said door-housing portion, wherein

said blow mode-changing door sealingly abuts against said sealing ~~[[ribs]]~~
rib, thereby simultaneously blocking both said foot opening and said face opening.

3. (original) The vehicle air conditioning system according to claim 1,
wherein

said door-housing portion is formed of a cylindrical portion parallel to an axial direction of said blow mode-changing door,

an expanded portion expanded radially outward is formed on part of a circumferential surface of said cylindrical portion, and

said bi-level mode bypass passageway is formed inside said expanded portion.

4. (original) The vehicle air conditioning system according to claim 2,
wherein

said door-housing portion is formed of a cylindrical portion parallel to an axial direction of said blow mode-changing door,

an expanded portion expanded radially outward is formed on part of a circumferential surface of said cylindrical portion, and

said bi-level mode bypass passageway is formed inside said expanded portion.

5. (original) The vehicle air conditioning system according to claim 3, wherein

said cylindrical portion is disposed so as to extend in a transverse direction of the vehicle, with said expanded portion and said face opening being disposed at a central portion of the cylindrical portion in the transverse direction of the vehicle, and

said foot opening is disposed at either side of said cylindrical portion in the transverse direction of the vehicle.

6. (withdrawn; currently amended) The vehicle air conditioning system according to claim 1, wherein

said door-housing portion is disposed so as to extend in ~~[[the]]~~ a transverse direction of the vehicle,

said foot opening is disposed at either side of said cylindrical portion in the transverse direction of the vehicle,

a width of said cool air inlet in the transverse direction of the vehicle is less than a width of said hot air inlet in the transverse direction of the vehicle, and

said bi-level mode bypass passageway is located at a position corresponding to said cool air inlet in said door-housing portion in the transverse direction of the vehicle.

7. (withdrawn; currently amended) The vehicle air conditioning system according to claim 2, wherein

said door-housing portion is disposed so as to extend in ~~[[the]]~~ a transverse direction of the vehicle,

said foot opening is disposed at either side of said cylindrical portion in the transverse direction of the vehicle,

a width of said cool air inlet in the transverse direction of the vehicle is less than a width of said hot air inlet in the transverse direction of the vehicle, and

said bi-level mode bypass passageway is located at a position corresponding to said cool air inlet in said door-housing portion in the transverse direction of the vehicle.

8. (currently amended) The vehicle air conditioning system according to claim 1, ~~further comprising:~~

~~an air conditioning case through which air to be blown toward front seats in a passenger compartment flows,~~

~~a heating heat exchanger, disposed within said air conditioning case, for heating air, and~~

~~a rear seat cool air bypass passageway disposed below said heating heat exchanger within said air conditioning case, wherein~~

wherein said first housing portion defines an air passage through which air to be blown toward front seats in a passenger compartment flows and a rear seat cool air bypass passageway below said heating heat exchanger,

said ~~[[cool]]~~ first air inlet is a rear seat cool air inlet ~~into which cool air is introduced from said rear seat cool air bypass passageway~~ through which cool air is introduced from said bypass passageway to said second housing portion,

said ~~[[hot]]~~ second air inlet is a rear seat hot air inlet ~~[[into]]~~ through which the hot air having passed through said heating heat exchanger is introduced in the second housing portion,

said foot opening is a rear seat foot opening for blowing air toward a ~~[[feet]]~~ foot of a rear seat passenger, and

said face opening is a rear seat face opening for blowing air toward an upper body of a rear seat passenger.

9. (withdrawn; currently amended) The vehicle air conditioning system according to claim 6, ~~further comprising:~~

~~an air conditioning case through which air to be blown toward front seats in a passenger compartment flows,~~

~~a heating heat exchanger, disposed within said air conditioning case, for heating air, and~~

~~a rear seat cool air bypass passageway disposed below said heating heat exchanger within said air conditioning case, wherein~~

wherein said first housing portion defines an air passage through which air to be blown toward front seats in a passenger compartment flows and a rear seat cool air bypass passageway below said heating heat exchanger,

said ~~[[cool]]~~ first air inlet is a rear seat cool air inlet ~~into which cool air is introduced from said rear seat cool air bypass passageway~~ through which cool air is introduced from said bypass passageway to said second housing portion,

said ~~[[hot]]~~ second air inlet is a rear seat hot air inlet ~~[[into]]~~ through which the hot air having passed through said heating heat exchanger is introduced in the second housing portion,

said foot opening is a rear seat foot opening for blowing air toward a ~~[[feet]]~~ foot of a rear seat passenger, and

said face opening is a rear seat face opening for blowing air toward an upper body of a rear seat passenger.

10. (withdrawn; currently amended) The vehicle air conditioning system according to claim 7, ~~further comprising:~~

~~an air conditioning case through which air to be blown toward front seats in a passenger compartment flows,~~

~~a heating heat exchanger, disposed within said air conditioning case, for heating air, and~~

~~a rear seat cool air bypass passageway disposed below said heating heat exchanger within said air conditioning case, wherein~~

wherein said first housing portion defines an air passage through which air to be blown toward front seats in a passenger compartment flows and a rear seat cool air bypass passageway below said heating heat exchanger,

said ~~[[cool]]~~ first air inlet is a rear seat cool air inlet ~~into which cool air is introduced from said rear seat cool air bypass passageway~~ through which cool air is introduced from said bypass passageway to said second housing portion,

said ~~[[hot]]~~ second air inlet is a rear seat hot air inlet ~~[[into]]~~ through which the hot air having passed through said heating heat exchanger is introduced in the second housing portion,

said foot opening is a rear seat foot opening for blowing air toward a ~~[[feet]]~~ foot of a rear seat passenger, and

said face opening is a rear seat face opening for blowing air toward an upper body of a rear seat passenger.

11. (currently amended) An apparatus comprising:

a case defining a first air inlet and a second air inlet, wherein said second air inlet is disposed ~~adjacent to~~ higher than said first air inlet, said first air inlet permits cool air to enter said case and said second air inlet permits hot air to enter said case;

a foot opening defined by said case and disposed lower than said first air inlet and said second air inlet;

a face opening defined by said case and disposed higher than said first air inlet and said second air inlet;

a blow mode-changing door, wherein said door is a butterfly door ~~for opening and closing said foot opening and said face opening~~ movable to a first position where said foot opening is fully closed and said face opening is open, a second position

where said foot opening is open and said face opening is fully closed, and a third position where said foot opening and said face opening are open;

a door housing portion defined by the case for pivotally housing said blow mode changing door, wherein ~~said blow mode changing door (39) opens both said foot opening and said face opening;~~

~~a bi-level mode bypass passageway defined by an inner wall surface of said door housing portion and an extremity of said blow mode changing door, wherein said bi-level mode passageway permits cool air from said first air inlet into said face opening; and~~

~~an expanded portion expanded radially outward is formed on part of a circumferential surface of said door housing portion, wherein~~

~~said bi-level mode bypass passageway is formed inside said expanded portion.~~

the door housing portion is formed of a cylindrical portion parallel to an axial direction of said blow mode-changing door,

an expanded portion expanded radially outward is formed on a part of a circumferential surface of said door housing portion,

a bi-level mode bypass passageway is formed inside the said expanded portion, and said bi-level mode passageway permits cool air from said first air inlet into said face opening.